

SECTION

14.5

ECOLOGICAL SUCCESSION

Reinforcement

KEY CONCEPT Ecological succession is a process of change in the species that make up a community.

Each time an ecosystem is damaged, the process of succession re-forms the area.

Succession is the sequence of biotic changes that regenerate a damaged community or create a community in a previously uninhabited area. Succession is a process with no distinct beginning or end. In a community, succession is always occurring.

After a volcano erupts, the molten lava hardens and leaves behind nothing but solid rock.

Primary succession is a type of succession that begins with a previously uninhabited, barren landscape. **Pioneer species** are the first organisms that live in this type of habitat. Pioneer species begin the process of breaking down the rock into soil that can hold plants. This process may take hundreds of years, but eventually the soil produced by pioneer species will give rise to entire ecosystems of plants, animals, and other organisms.

More often an environment had many different plants and animals, but a disaster such as a fire or flood may have destroyed much of the habitat. **Secondary succession** is the reestablishment of a damaged ecosystem in an area where the soil was left intact. The dynamic processes of succession are always changing the face of an ecosystem.

1. What is succession?

2. Why are pioneer species so important for primary succession?

3. Explain why succession is a never-ending process.
